

# Work Order ID 56528

March 1, 2010 9:29:33 AM



Page 1

Item ID: D3394-041

Revision ID:

Item Name: Lug Assembly

Start Date: 3/01/10 Start Qty: 40.00

Required Date: 3/05/10 Req'd Qty: 40.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3394

Rev A

Rev B

P10 →

100



Bandsaw

Jeaspa Bandsaw

BAND SAW

Memo

Cut Blank to .850"

0.00

0.00

DJP 10/03/02

40

8

110



Outsource5

Outsource process - Machining

Outsource process - Machining

Memo

Send Blanks To: Metec/Mast Precision  
Machining P/O:

☐ Machine D3394-1 as per Dwg D3394

0.00

0.00

HANS CNC #2

DJP 10/03/02

40

8

120



Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

0.00

242 DJP 10/03/02

W/O: 5528		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/03/11	#100	Per. Chan Fix header Rev. to correct Rev on Day.	AD	10.03.16			S 10/03/11

Part No: D3394-041 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



# Work Order ID 56528

March 1, 2010 9:29:33 AM



Page 2

Item ID: D3394-041

Revision ID:

Item Name: Lug Assembly

Start Date: 3/01/10 Start Qty: 40.00

Required Date: 3/05/10 Req'd Qty: 40.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC- Inspect dimensions to drawing

0.00

QC & inspect and check

0.00

8/10/03/111

QC

Memo

Quality Control

QC & was never Done before  
Powder coat.

~~40~~  
(40)  
counters

140

Chemical Conversion Coat per QSI005 4.1

0.00

M/ 10/03/04

HandFinish

Memo

0.00

(40) ~~40~~

Hand Finishing

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M/13/70

0.00

=> M/ 10/03/06

Powdercoat

Memo

(40) ~~40~~

Powder Coating

START TIME:

10:00am

OVEN TEMPERATURE:

10:30am FINISH TIME:

320°F

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 56528

March 1, 2010 9:29:34 AM



Page 3

Item ID: D3394-041

Accept

Revision ID:

Item Name: Lug Assembly

Start Date: 3/01/10 Start Qty: 40.00

Required Date: 3/05/10 Req'd Qty: 40.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

BR 10-3-10. (10) p

170



Small Fab

Small Fab

Small Fab

Memo

Assemble as per Dwg D3394

0.00

0.00

4510/03/11 (40)

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

5 wks/11

counters (40)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 56528**

March 1, 2010 9:29:34 AM



Page 4

Item ID: D3394-041

Accept

Revision ID:

Item Name: Lug Assembly

Start Date: 3/01/10

Start Qty: 40.00

Required Date: 3/05/10

Req'd Qty: 40.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

Identify as per dwg & Stock Location: 474

0.00



Packaging

Memo

0.00

Packaging

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10-3-12 - (40x) SP

10/03/10 HJ

Pl 10-3-14  
(40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

March 1, 2010 9:29:32 AM

Page 1

Work Order ID: 56528

Parent Item: D3394-041

Parent Item Name: Lug Assembly



Comments: IPP Rev: A New Issue 06-01-06 JLM

Start Date: 3/01/10

Required Date: 3/05/10

Start Qty: 40.00

Required Qty: 40.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2423  Lug Extrusion		Manufactured	No			110	f	588.6399	2.9474			

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	588.6399432	
43722	175.629406	
44529	5.7731	
45800	407.237437	

D3394-1P



Lug

MS35489-93



GROMMET

Purchased

No

170

Each

0.0000

40.0000

2.9474 JLP 3/6/10

Purchased

No

100

Each

116.0000

80.0000

ES 10/03/10

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	116	
113288	16	
113368	100	

23 M114108 54

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DART AEROSPACE LTD		Work Order: 56528
Description: Lug		Part Number: D3394-1
Inspection Dwg: D3394	Rev: B	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.450	+/-0.010	4.450	✓			
0.345	+/-0.010	0.345	✓			
0.306	+/-0.010	0.307	✓			
3.700	+/-0.010	3.700	✓			
0.750	+/-0.010	0.752	✓			
Ø0.257	+0.005/-0.000	0.259	✓			
Ø0.453	+0.006/-0.001	0.455	✓			
0.375	+/-0.010	0.375	✓			
R1.000	+/-0.010	1.000	✓			REF
0.400	+/-0.010	0.401	✓			
0.250	+/-0.010	0.252	✓			
1.91	+/-0.030	1.907	✓			REF
R0.125	+/-0.010	0.125	✓			REF

Measured by: DTP	Audited by: S	Prototype Approval:	N/A
Date: 10/03/02	Date: 10/03/04	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.06.11	New Issue P/O D3394-041	KJ	
B	09.11.04	Dimension updated per Dwg Rev B	KJ	



100

100

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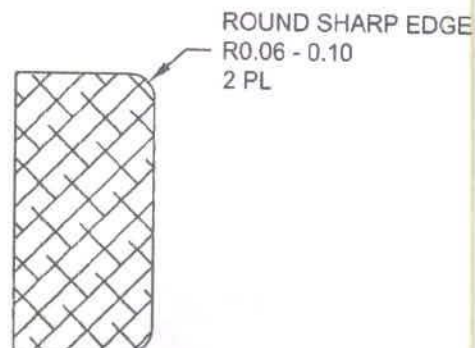
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100

DRAWING NO. D3394	TITLE LUG	REV. B	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3394-B-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED	MFG. APPR.	APPROVED		DE APPR.		
DATE 09.11.04	DATE 09.11.04	DATE 09.11.04	DATE 09.11.04		DATE 09.11.04		

SHEET 4 ZONE A,1 MODIFY SECTION A-A AS SHOWN:

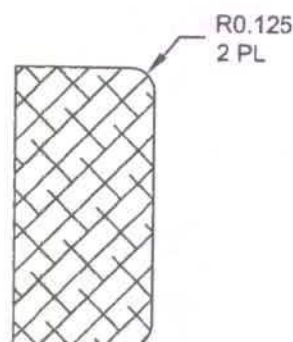
IS:



SECTION A-A

*u/o 56522*

WAS:



SECTION A-A

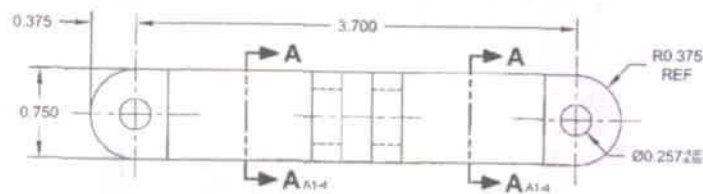
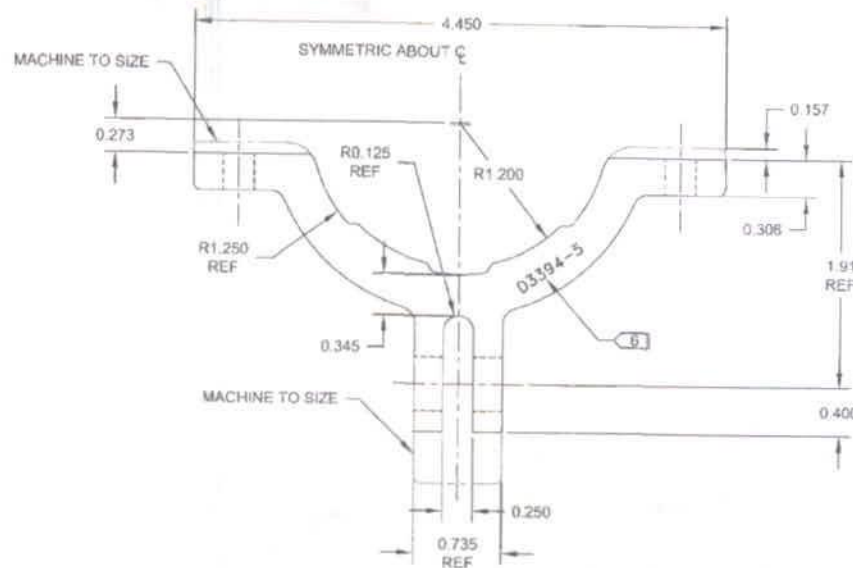
**RELEASED**  
2009-11-25  
*u/o*

REASON: DRAFTING ERROR

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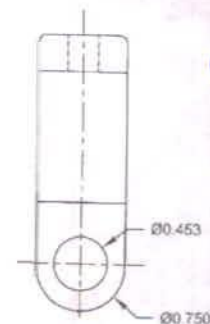




D3394-5 LUG

NOTES:

- 1) MATERIAL: MAKE FROM D2423
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO DEPTH OF 0.010±0.005 IN THIS LOCATION.  
WITH TOOL A TIP RADIUS OF 0.015±0.005
- 7) WEIGHT: 0.18 lbs

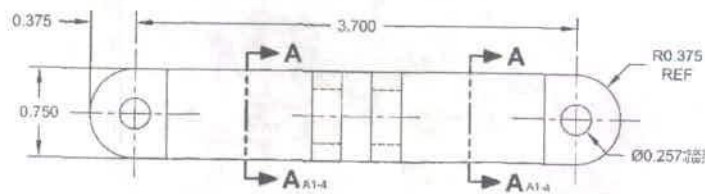
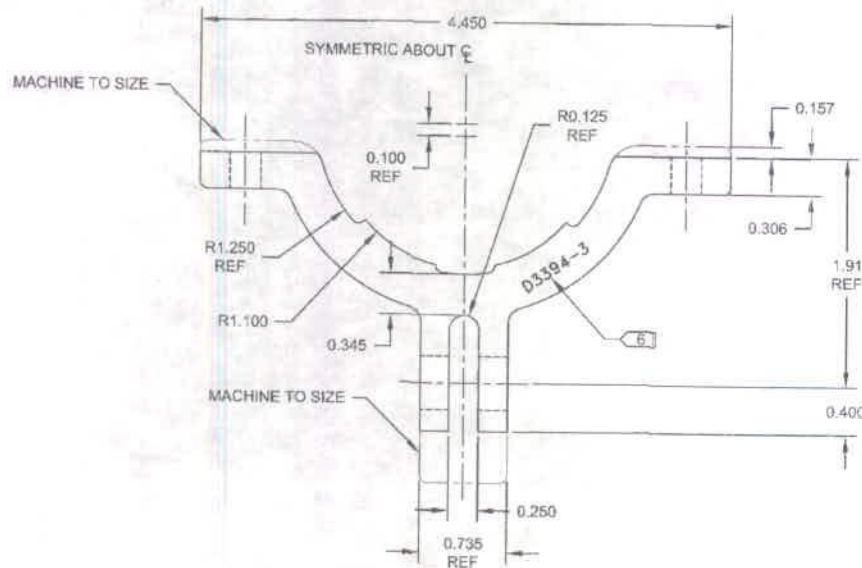


SECTION A-A

B5-3  
B4-2  
B5-3  
B4-3  
B5-4  
B4-4

DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	A/S		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3394	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LUG	NTS
DATE	09.04.02	COPYRIGHT © 2005 BY DART AEROSPACE LTD	

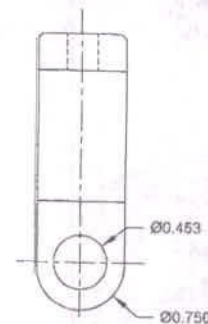




D3394-3 LUG

NOTES:

- 1) MATERIAL: MAKE FROM D2423
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO DEPTH OF 0.010±0.005 IN THIS LOCATION.  
WITH TOOL A TIP RADIUS OF 0.015±0.005
- 7) WEIGHT: 0.18 lbs



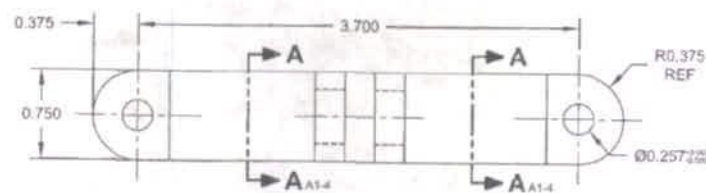
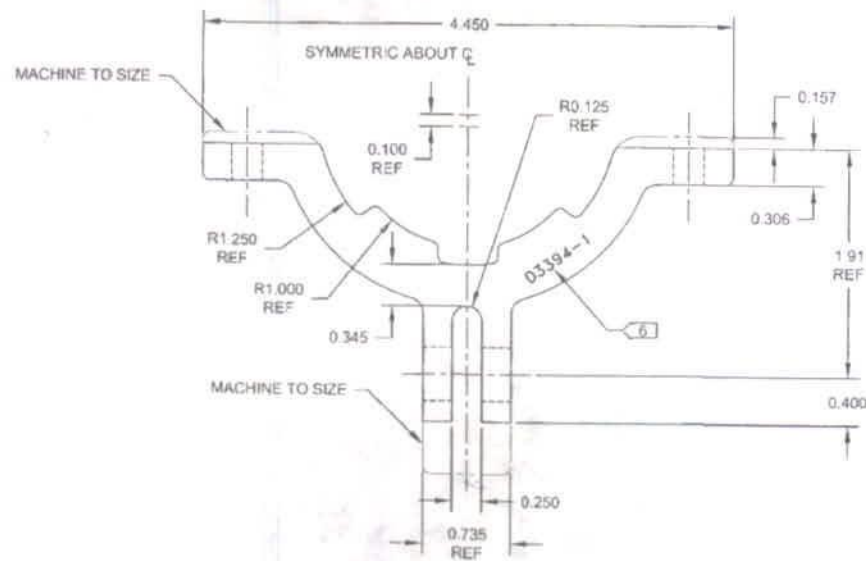
DEO ATTACHED

RELEASED  
09/04/02

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	A.S.		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3394	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LUG	NTS
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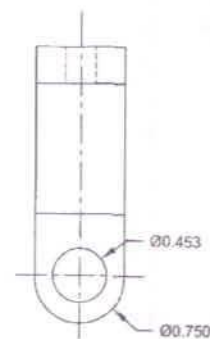




D3394-1 LUG

NOTES:

- 1) MATERIAL: MAKE FROM D2423
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO DEPTH OF 0.010±0.005 IN THIS LOCATION,  
WITH TOOL A TIP RADIUS OF 0.015±0.005
- 7) WEIGHT: 0.18 lbs



DEO ATTACHED

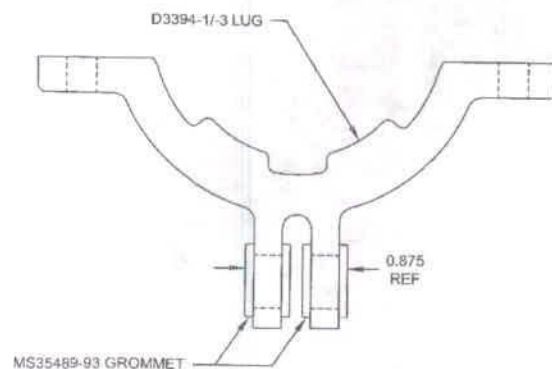
RELEASED  
09/06/2011

DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	ALS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR		D3394	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR		LUG	NTS
DATE	09.04.02	COPYRIGHT © 2005 BY DART AEROSPACE LTD	

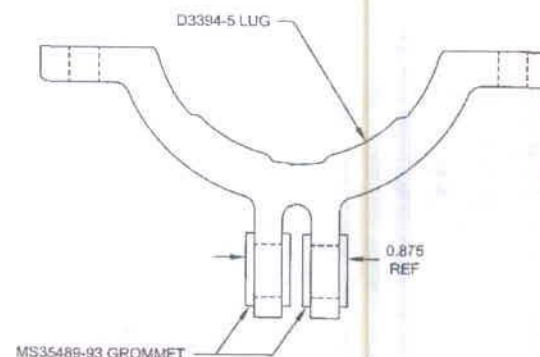




QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
X			D3394-041	LUG ASSEMBLY
	X		D3394-043	LUG ASSEMBLY
		X	D3394-045	LUG ASSEMBLY
1			D3394-1	LUG
	1		D3394-3	LUG
		1	D3394-5	LUG
2	2	2	MS35489-93	GROMMET



D3394-041/-043 LUG ASSEMBLY



D3394-045 LUG ASSEMBLY

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.20 lbs APPROX

B	ADDED -045, SHT 4 ADDED FILLETS IN SECTION A-A. SEE PAR 152	AJS	09.04.02
A	NEW ISSUE	PH	05.02.14
REV	DESCRIPTION	BY	DATE
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3394	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LUG	NTS
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DEO ATTACHED

RELEASED  
09/04/02

w/b 3528

